

AMENDMENTS TO THE CLAIMS

Please cancel Claims 23, 24, 27, 28, 29, 31, 32, 34-49 and 51-55; amend Claims 22 and 25; and add new Claims 56-84 as follows.

LISTING OF CLAIMS

1.-21. (cancelled)

22. (currently amended) An ejector-type refrigerant cycle device, comprising:

- a compressor that sucks and compresses refrigerant;
- a radiator that radiates heat from the high-pressure refrigerant discharged from the compressor;
- an ejector having a nozzle portion that depressurizes and expands refrigerant on a downstream side of the radiator, and a refrigerant suction port through which refrigerant is sucked by the flow of refrigerant jetted at high speed from the nozzle portion;
- a first evaporator having a refrigerant outflow side connected to a suction side of the compressor and a refrigerant inflow side connected to a refrigerant outflow side of the ejector;
- a first branch passage that branches a flow of refrigerant upstream of the ejector and guides the branched flow of refrigerant to the refrigerant suction port;
- a first throttling means that is disposed in the first branch passage and depressurizes and expands refrigerant; and
- a second evaporator that is disposed in the first branch passage downstream of the first throttling means, wherein:

a refrigerant evaporating pressure of the second evaporator is lower than a refrigerant evaporating pressure of the first evaporator; and
the first throttling means is provided with a fully opening function, and fully opens the first branch passage when the second evaporator is defrosted.

23.-24. (cancelled)

25. (currently amended) The ejector-type refrigerant cycle device according to Claim 22, further comprising:

a third evaporator that evaporates refrigerant to have a cooling capability ~~in a temperature zone~~ that is the same as that of the first evaporator.

26. (previously presented) The ejector-type refrigerant cycle device according to Claim 25, further comprising:

a second branch passage that branches the flow of refrigerant at a portion of the first branch passage positioned upstream of the first throttling means and joins the branched flow of refrigerant to the flow of refrigerant between the refrigerant outflow side of the first evaporator and the suction side of the compressor; and

a second throttling means that is disposed in the second branch passage and depressurizes and expands refrigerant,

wherein the third evaporator is disposed in the second branch passage downstream of the second throttling means.

27.-29. (cancelled)

30. (previously presented) The ejector-type refrigerant cycle device according to Claim 22, further comprising

a third throttling means that is provided between a refrigerant outflow side of the radiator and a refrigerant inflow side of the first evaporator,
wherein the ejector is provided in parallel with the third throttling means.

31.-32. (cancelled)

33. (previously presented) The ejector-type refrigerant cycle device according to Claim 22, further comprising:

a shut mechanism that shuts a passage area located upstream of the ejector when the second evaporator is defrosted.

34.-49. (cancelled)

50. (previously presented) The ejector-type refrigerant cycle device according to Claim 22, further comprising:

a vapor-liquid separator that is provided on a refrigerant outflow side of the first evaporator,

wherein the vapor-liquid separator separates refrigerant into vapor and liquid, and stores liquid phase refrigerant and lets vapor phase refrigerant out to a

refrigerant suction side of the compressor.

51.-55. (cancelled)

56. (new) The ejector-type refrigerant cycle device according to Claim 22, wherein said first throttling means is movable between a first position which is fully opened and a second position which defines a fixed throttle.

57. (new) The ejector-type refrigerant cycle device according to Claim 56, wherein the throttling means is only movable between the first and second positions.

58. (new) The ejector-type refrigerant cycle device according to Claim 22, wherein the refrigerant outflow side of the evaporator is connected directly to the suction side of the compressor.

59. (new) An ejector-type refrigerant cycle device, comprising:
a compressor that sucks and compresses refrigerant;
a radiator that radiates heat from the high-pressure refrigerant discharged from the compressor;
an ejector having a nozzle portion that depressurizes and expands refrigerant, the ejector being disposed directly downstream from the radiator, and a refrigerant suction port through which refrigerant is sucked by the flow of refrigerant jetted at high speed from the nozzle portion;

a first evaporator having a refrigerant outflow side directly connected to a suction side of the compressor;

a first branch passage that branches a flow of refrigerant upstream of the ejector and guides the branched flow of refrigerant to the refrigerant suction port;

a first throttling means that is disposed in the first branch passage and depressurizes and expands refrigerant; and

a second evaporator that is disposed in the first branch passage directly downstream of the first throttling means, wherein:

a refrigerant evaporating pressure of the second evaporator is lower than a refrigerant evaporating pressure of the first evaporator; and

the first throttling means is provided with a fully opening function, and fully opens the first branch passage when the second evaporator is defrosted.

60. (new) The ejector-type refrigerant cycle device according to Claim 59, further comprising:

a third evaporator that evaporates refrigerant to have a cooling capability that is the same as that of the first evaporator.

61. (new) The ejector-type refrigerant cycle device according to Claim 60, further comprising:

a second branch passage that branches the flow of refrigerant at a portion of the first branch passage positioned upstream of the first throttling means and joins the branched flow of refrigerant to the flow of refrigerant between the refrigerant outflow

side of the first evaporator and the suction side of the compressor; and
a second throttling means that is disposed in the second branch passage
and depressurizes and expands refrigerant,
wherein the third evaporator is disposed in the second branch passage
downstream of the second throttling means.

62. (new) The ejector-type refrigerant cycle device according to Claim 22,
wherein the first evaporator is connected directly to a refrigerant outflow
side of the ejector.

63. (new) The ejector-type refrigerant cycle device according to Claim 59,
further comprising
a third throttling means that is provided between a refrigerant outflow side
of the radiator and a refrigerant inflow side of the first evaporator,
wherein the ejector is provided in parallel with the third throttling means.

64. (new) The ejector-type refrigerant cycle device according to Claim 59,
further comprising:
a shut mechanism that shuts a passage area located upstream of the
ejector when the second evaporator is defrosted.

65. (new) The ejector-type refrigerant cycle device according to Claim 59,
further comprising:

a vapor-liquid separator that is provided on a refrigerant outflow side of the first evaporator,

wherein the vapor-liquid separator separates refrigerant into vapor and liquid, and stores liquid phase refrigerant and lets vapor phase refrigerant out to a refrigerant suction side of the compressor.

66. (new) The ejector-type refrigerant cycle device according to Claim 59, wherein said first throttling means is movable between a first position which is fully opened and a second position which defines a fixed throttle.

67. (new) The ejector-type refrigerant cycle device according to Claim 66, wherein the throttling means is only movable between the first and second positions.

68. (new) An ejector-type refrigerant cycle device, comprising:
a compressor that sucks and compresses refrigerant;
a radiator that radiates heat from the high-pressure refrigerant discharged from the compressor;

an ejector having a nozzle portion that depressurizes and expands refrigerant on a downstream side of the radiator, and a refrigerant suction port through which refrigerant is sucked by the flow of refrigerant jetted at high speed from the nozzle portion;

a first evaporator having a refrigerant outflow side connected to a suction side of the compressor;

a first branch passage that branches a flow of refrigerant upstream of the ejector and guides the branched flow of refrigerant to the refrigerant suction port;

a first throttling means that is disposed in the first branch passage and depressurizes and expands refrigerant, the first throttling means being movable between a first position which is fully opened and a second position which defines a fixed throttle; and

a second evaporator that is disposed in the first branch passage downstream of the first throttling means, wherein:

a refrigerant evaporating pressure of the second evaporator is lower than a refrigerant evaporating pressure of the first evaporator; and

the first throttling means is provided with a fully opening function, and fully opens the first branch passage when the second evaporator is defrosted.

69. (new) The ejector-type refrigerant cycle device according to Claim 68, further comprising:

a third evaporator that evaporates refrigerant to have a cooling capability that is the same as that of the first evaporator.

70. (new) The ejector-type refrigerant cycle device according to Claim 69, further comprising:

a second branch passage that branches the flow of refrigerant at a portion of the first branch passage positioned upstream of the first throttling means and joins the branched flow of refrigerant to the flow of refrigerant between the refrigerant outflow

side of the first evaporator and the suction side of the compressor; and
a second throttling means that is disposed in the second branch passage
and depressurizes and expands refrigerant,
wherein the third evaporator is disposed in the second branch passage
downstream of the second throttling means.

71. (new) The ejector-type refrigerant cycle device according to Claim 68,
wherein the first evaporator is connected directly to a refrigerant outflow
side of the ejector.

72. (new) The ejector-type refrigerant cycle device according to Claim 68,
further comprising
a third throttling means that is provided between a refrigerant outflow side
of the radiator and a refrigerant inflow side of the first evaporator,
wherein the ejector is provided in parallel with the third throttling means.

73. (new) The ejector-type refrigerant cycle device according to Claim 68,
further comprising:
a shut mechanism that shuts a passage area located upstream of the
ejector when the second evaporator is defrosted.

74. (new) The ejector-type refrigerant cycle device according to Claim 68,
further comprising:

a vapor-liquid separator that is provided on a refrigerant outflow side of the first evaporator,

wherein the vapor-liquid separator separates refrigerant into vapor and liquid, and stores liquid phase refrigerant and lets vapor phase refrigerant out to a refrigerant suction side of the compressor.

75. (new) The ejector-type refrigerant cycle device according to Claim 68, wherein the throttling means is only movable between the first and second positions.

76. (new) An ejector-type refrigerant cycle device, comprising:

a compressor that sucks and compresses refrigerant;

a radiator that radiates heat from the high-pressure refrigerant discharged from the compressor;

an ejector having a nozzle portion that depressurizes and expands refrigerant on a downstream side of the radiator, and a refrigerant suction port through which refrigerant is sucked by the flow of refrigerant jetted at high speed from the nozzle portion;

a first evaporator having a refrigerant outflow side connected directly to a suction side of the compressor;

a first branch passage that branches a flow of refrigerant upstream of the ejector and guides the branched flow of refrigerant to the refrigerant suction port;

a first throttling means that is disposed in the first branch passage and depressurizes and expands refrigerant; and

a second evaporator that is disposed in the first branch passage downstream of the first throttling means, wherein:

a refrigerant evaporating pressure of the second evaporator is lower than a refrigerant evaporating pressure of the first evaporator; and

the first throttling means is provided with a fully opening function, and fully opens the first branch passage when the second evaporator is defrosted.

77. (new) The ejector-type refrigerant cycle device according to Claim 76, further comprising:

a third evaporator that evaporates refrigerant to have a cooling capability that is the same as that of the first evaporator.

78. (new) The ejector-type refrigerant cycle device according to Claim 77, further comprising:

a second branch passage that branches the flow of refrigerant at a portion of the first branch passage positioned upstream of the first throttling means and joins the branched flow of refrigerant to the flow of refrigerant between the refrigerant outflow side of the first evaporator and the suction side of the compressor; and

a second throttling means that is disposed in the second branch passage and depressurizes and expands refrigerant,

wherein the third evaporator is disposed in the second branch passage downstream of the second throttling means.

79. (new) The ejector-type refrigerant cycle device according to Claim 76, wherein the first evaporator is connected directly to a refrigerant outflow side of the ejector.

80. (new) The ejector-type refrigerant cycle device according to Claim 76, further comprising

a third throttling means that is provided between a refrigerant outflow side of the radiator and a refrigerant inflow side of the first evaporator, wherein the ejector is provided in parallel with the third throttling means.

81. (new) The ejector-type refrigerant cycle device according to Claim 76, further comprising:

a shut mechanism that shuts a passage area located upstream of the ejector when the second evaporator is defrosted.

82. (new) The ejector-type refrigerant cycle device according to Claim 76, further comprising:

a vapor-liquid separator that is provided on a refrigerant outflow side of the first evaporator,

wherein the vapor-liquid separator separates refrigerant into vapor and liquid, and stores liquid phase refrigerant and lets vapor phase refrigerant out to a refrigerant suction side of the compressor.

83. (new) The ejector-type refrigerant cycle device according to Claim 76, wherein said first throttling means is movable between a first position which is fully opened and a second position which defines a fixed throttle.

84. (new) The ejector-type refrigerant cycle device according to Claim 83, wherein the throttling means is only movable between the first and second positions.